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**COOPERATIVE EXTENSION WORK IN AGRICULTURE
AND HOME ECONOMICS**

**United States Department of Agriculture and State
Agricultural Colleges Cooperating**

BOYS' AND GIRLS' CLUB WORK

Growing Seeds for the Home Garden

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A Cooperative Garden Seed-Growing Team

**Circular 8
Office of Extension Work, North and West
States Relations Service**

Growing Seeds for the Home Garden.

Club members ought to grow their own garden seeds. They can grow many of the common garden seeds in the home garden (fig. 1). In this way they will be sure to have the varieties true to name, if they start with true varieties and do not allow them to become mixed. They may even improve the varieties year by year by selecting and saving the best plants to produce seeds. The growing of garden seeds, besides assuring the necessary supply of seeds, furnishes an opportunity to study varieties, to observe carefully and critically the similarities and differences in varieties, and to select the best and most perfect specimens for seed production.

Garden plants are divided into two groups, the annuals, which grow from seed and produce seed the same year, like lettuce, sweet corn, beans, etc., and the biennials, which grow from seeds one year, are kept over winter, and produce seeds the second year, like beets, carrots, cabbage, etc.

USE HEALTHY PRODUCTIVE PLANTS OF GOOD TYPE.

For seed production select only healthy plants, because some diseases are carried over winter on the seeds. The seeds from weak or diseased plants will be likely to produce plants of the same kind, while seeds from strong productive plants of good type will tend to produce plants which are strong, productive, and of good type.

SELECTING FOR COLOR.

A rich color adds to the attractiveness of the flesh of a vegetable, even though it does not necessarily improve its quality. For this reason, in selecting seed beets of a red-fleshed variety take the richest colored ones, and in selecting seed of a pink-fleshed variety take the brightest beets. With vegetables of yellow flesh take the yellowest ones and with those of white flesh take the whitest ones. To determine the color take out a small piece of flesh with the thumb nail or a knife.

SELECTING AND STORING ROOT CROPS FOR SEED PRODUCTION.

The root crops included here are beets, carrots, late radishes, turnips, and rutabagas, which are always dug in the fall. The late-planted crops are the best for seed purposes. At digging time select

the roots to be saved for seed growing the next year. Take those of best shape, size, and color for the variety. Cut off all but an inch or two of the leaves, and store the roots in a frost-proof pit (see fig. 2) or root cellar. If a root cellar must be used and it is cool and dry, protect the roots from withering by packing them in sand, fine garden soil, or sifted coal ashes kept very slightly moistened. A cellar with a heating plant is too dry and warm for storage use.

Salsify and parsnip are usually left in the garden over winter, but if they are dug in the fall, store them with the roots just mentioned.

COOPERATIVE SEED-GROWING CLUBS.

As a war-time enterprise boys and girls might well form seed-growing clubs to supply the needs of a whole community. Since the different varieties of most vegetables mix so readily when seed is grown, especial caution is necessary to keep the varieties pure. For this reason it is advisable for a club member to grow the seed of only one variety of any vegetable, as, for instance, the beet. Other varieties can be grown by other members. The different varieties, however, should be grown in different parts of the community, and at sufficient distances apart to avoid mixing. One member may safely grow one variety each of several vegetables such as beets, cabbage, carrots, parsnips, salsify, turnips, celery, onions,



Fig. 1.—Members of the boys' and girls' garden clubs should grow many of their garden seeds in the home garden.

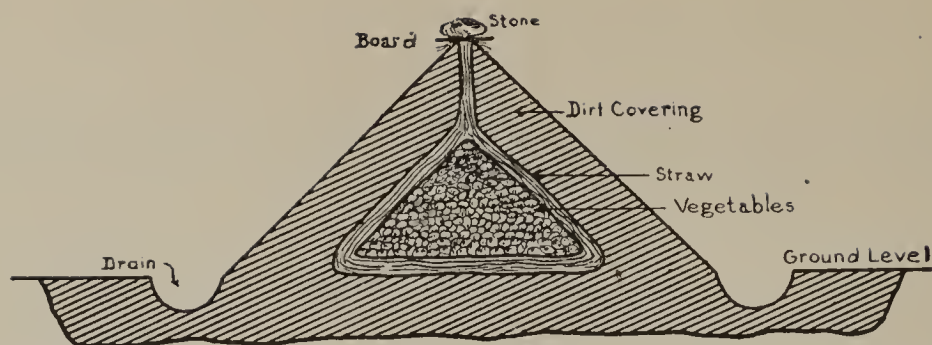


Fig. 2.—How a storage pit may be built. During severely cold weather the dirt covering may be supplemented by manure, straw, etc.

corn, cucumbers, muskmelons, or squashes. Cabbage, collards, kale, and kohl-rabi mix together so readily that it is not safe to grow seed plants of these four vegetables together or even in neighboring gardens.

Before either planting or furnishing other club members the seeds you grow, make a seed tester and test them as described in Circular NR-3.

DIRECTIONS FOR GROWING AND STORING GARDEN SEEDS.

Such root crops as beets, carrots, turnips, etc., and cabbage, collards, kale, kohl-rabi, chard, lettuce, and okra should be planted from 2 to 3 feet apart in rows 3 to 4 feet apart.

All seeds should be thoroughly dried in the shade and pieces of leaves, stems, etc., removed before being put into bags or boxes for storing. Label each package, giving the variety name and the season when the seed was grown, and store the packages in tin or other metal boxes or cans with holes in them for ventilation. A bread box is ideal, but any tin box with holes punched in it will do. Keep the box in a cool, dry place.

The following brief directions are meant to guide you in growing the home supply of garden seeds:

Beans, string and lima.—Either select healthy plants with a good crop of pods of large even size, or when picking beans for table use leave the best and largest pods to ripen. When the pods are ripe either pick them, or pull up the plants, and spread in a dry place. When thoroughly dry shell the pods by hand or by putting the pods or plants into a stout bag and beating with a stick. Then clean and store the seeds.

Beet.—In the spring plant the beets selected and stored the previous fall for seed purposes. As the seed stalks grow support them with stakes. When the seeds are ripe and before they shatter, cut off the seed stalks and put them in a dry, airy place. When thoroughly dry, rub off the seeds and store.

Brussels sprouts.—Follow directions given for cabbage.

Cabbage.—Select the plants with the best heads in the fall crop. Dig the plants up, roots and all, and store in trenches with the roots downward (see fig. 3).

Set the plants out in the spring, and when the seed pods turn yellow, cut off the seed stalks and lay them on sheets of paper or cloth in a dry place to ripen. When the pods are thoroughly dry rub out the seeds and store.

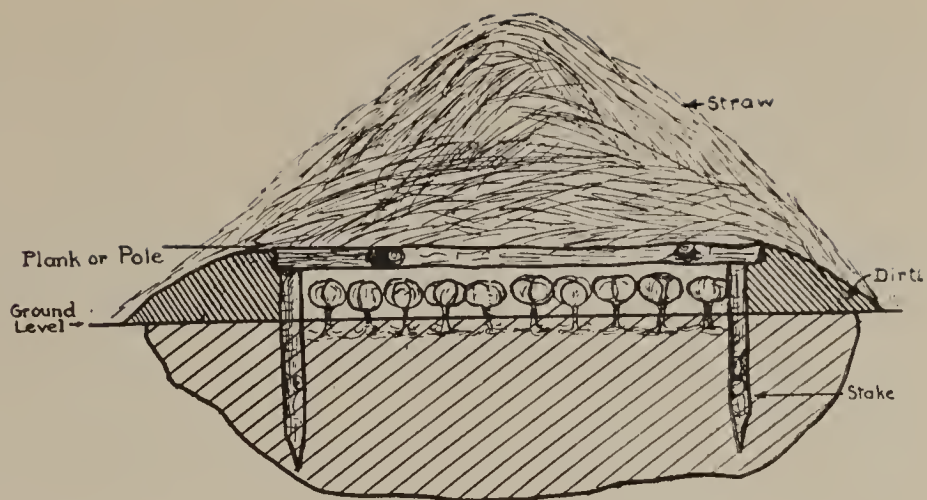


Fig. 3.—Arrangement of a cabbage storage pit made of stakes and poles and covered with straw.
This is a good way to store cabbage.

Do not grow seed plants of any two of the following, namely, cabbage, collard, kale or kohl-rabi, at the same time, because they mix, and the seed crop will be a mixture of the kinds of plants grown.

Carrot.—Select good carrots at digging time in the fall and follow directions given for beets.

Celeriac.—Follow directions given for celery.

Celery.—Select the best of the plants stored over winter and set them out early in the spring. When most of the seed clusters are ripe, cut the seed stalks and hang them in a dry place to finish ripening. When ripe rub or beat off the seeds and store.

Chard.—Either protect the plants in the garden over winter or dig and store the roots like beets. Handle the seed stalks and seeds in the same way as beets.

Collard.—Collard is quite hardy and if protected may be left in the garden over winter. A seed crop will be produced early in the spring. Gather, dry, shell, and store like cabbage seed.

Cucumber.—Choose the best cucumbers on healthy vigorous vines and let them get thoroughly ripe. Split them and scrape the seeds and pulp into a vessel. Let the seed and pulp ferment for a day or two, then pour off the pulp and wash the seeds in water until clean, or if desired the seeds may be washed out of the pulp as soon as they are scraped out of the cucumbers. After washing the seeds spread them out, and when thoroughly dry store in a bag or box.

Eggplant.—Take the seeds out of the ripe fruits, dry, and store.

Endive.—In the fall dig up the plants, leaving a ball of earth on the roots of each and store in a root cellar or cold frame. Set the plants in the garden early in the spring. Since the seeds ripen unevenly the seed stalks should be cut when most of the seeds are ripe and hung up to dry. When dry, either rub out the seeds by hand, or put the seed heads into a stout bag and beat them until the seeds drop out.

Kale.—Follow directions for collard.

Kohl-rabi.—Store fall-grown plants over winter and set them in the garden early in the spring. Cut the ripening seed stalks and follow directions for cabbage.

Lettuce.—Early plants in the spring are best for seed purposes. Either plant the seeds in the garden very early, or grow a few plants in a seed-box, hot-bed, or coldframe for transplanting to the garden. Allow only the best plants to go to seed. When the first seed heads begin to shatter pull the plants and put them heads downward in large paper bags and hang up to ripen in a dry room. Rub out the seeds and store.

Muskmelon.—Follow directions for cucumber.

Mustard.—Early spring-grown plants will produce seeds. Cut the seed stalks when the seed pods are turning yellow and spread them on cloth or paper until thoroughly dry; then shell out the seeds and store.

Onion, seed.—Select a few good smooth bulbs which were grown from seeds or bottom sets last year and plant them 3 inches deep early in the spring. When the seed heads (see fig. 4) are ripe and the seeds begin to shatter, cut off the stalks, spread in a dry place, and when thoroughly dry rub out the seeds and store.

Onion, bottom sets.—To produce bottom sets sow onion seed thickly in the row in early spring and cultivate and weed thoroughly during the season. When the tops ripen in the fall pull the little onions, spread them in a dry place to cure, then store.

Onion, top sets.—The winter-top or perennial type, also called asparagus onion, is used for early green onions



Fig. 4.—Seeding plants of onion in a home garden. They are in blossom and should be staked.

only; it does not form bulbs for storing. Plant top sets of this type early in September and by the following midsummer new top sets will be produced. Gather and cure these for planting in September.

Onion, bulblets.—The potato or multiplier onion divides itself into several bulblets. A bulblet planted in September grows into a large onion by the following midsummer. A large onion planted in September divides itself into several bulblets by the following midsummer, when they should be pulled and stored for September planting.

Okra.—Select a vigorous plant and let the pods mature. If they begin to split as they ripen, pick them at once. If they do not split, leave them on the plant until all are ripe. Remove the seeds, dry, and store.

Parsley.—Either keep fall-grown plants in a coldframe or pit, or protect in the garden by the use of mulch. In the spring set in the garden the plants dug in the fall. When the seed ripens, cut off the seed stalks, dry thoroughly, rub out the seed, and store.

Parsnip.—If the roots have been left in the ground all winter dig them in the spring before growth starts. Select the best and set them 3 feet apart in the row. When the seed is ripe, cut the stalks and cure in a dry room. Rub out the seeds and store.

Peas.—Follow directions given for beans.

Pepper.—Pick the seeds out of a ripe fruit, dry them, and store.

Potatoes.—Select hills with healthy vines and tubers of good uniform size, rather than hills of mixed sizes from small to very large. Store in a frost-proof cellar or pit.

Pumpkin.—Cut open the pumpkin, squeeze or scrape the seeds out of the stringy pulp, dry them, and store.

Radish, early.—Pull the finest mature roots grown in the early spring. Trim off all of the top except a few small central leaves and put the roots in a moist airy place for a few hours, then plant them with the crown an inch below the ground surface. When the seeds begin to ripen cut the seed stalks and lay them on paper or cloth in the sun to harden and dry. Rub out the seeds and store.

Radish, late.—Select good specimens of the late fall crop and follow directions given for beets.

Ruta-baga.—Follow directions given for turnip.

Salsify.—This is handled like parsnip except that the seed heads are picked and dried as they ripen. Rub out the seeds and store.

Spinach.—Plants which live over winter, or those from seeds planted early in the spring, will send up seed stalks and produce seeds. Cut the stalks when the seeds ripen and lay them on paper in a dry place. When thoroughly dry rub off the seeds and store.

Spinach, New Zealand.—Cut off the seed-bearing portions of the plants and handle the same as ordinary spinach.

Sweet corn.—Select medium-sized healthy stalks with good large ears, and when the husks and ears turn yellowish and become dry, either pull off the ears with husks left on, or cut the stalks and hang them in a dry place to ripen. Beware of any moisture, as it may cause the kernels to sprout or mold. Husk the ears and hang in a dry place free from frost.

Squash, summer.—Follow directions given for cucumber.

Squash, winter.—Follow directions given for pumpkin.

Tomato.—Select strong healthy plants with a good crop of fruits of uniform size, shape, and deep color. Cut the best fruits open, scrape the seeds into a vessel and let them ferment for a day or two. Then pour off the pulp and wash them in several changes of water. If only a few seeds are to be saved, they may be washed when taken from the tomato. Spread out the seeds in the shade to dry, then store them.

Turnip.—In the early spring set out a few good smooth turnips. When the seed pods turn yellow cut the seed stalks and put them in a protected place to dry. Rub out the seeds and store.

Vegetable marrow.—Follow directions given for pumpkin.

Watermelon.—Save the seeds from a good melon, dry them, and store.

GROWING AND SAVING FLOWER SEEDS.

Among the flowers there are annual and biennial plants, and also perennials which live more than two years. The annuals grow from seeds and produce seeds the same year. The seeds of the other two groups are sown one year, usually in the fall, and the plants bloom and produce seeds the second year. The method of growing, collecting, and drying the seeds is the same for all three groups.

Watch the seed pods or heads after the flowers drop, and if they ripen unevenly pick the ripe ones before the seeds shatter and put them on paper in a dry, airy place. If the seeds ripen evenly cut the seed stalks, lay them on a paper in a dry place, and when thoroughly dry rub out the seeds and store like vegetable seeds.

The names of a few flowers in the different groups follow: *Annuals*—aster, balsam, coxcomb, cosmos, mallow, lobelia, sweet pea, marigold, nasturtium, petunia, poppy, pot marigold, and zinnia; *biennials*—foxglove, pansy, hollyhock, and sweet william; *perennials*—blanket flower, phlox, oriental poppy, stock, columbine, canterbury bell, and larkspur.